

**KENWOOD**  
HI/FI STEREO COMPONENTS

# SERVICE MANUAL

**KD-1500**



**BELT DRIVE TURNTABLE**

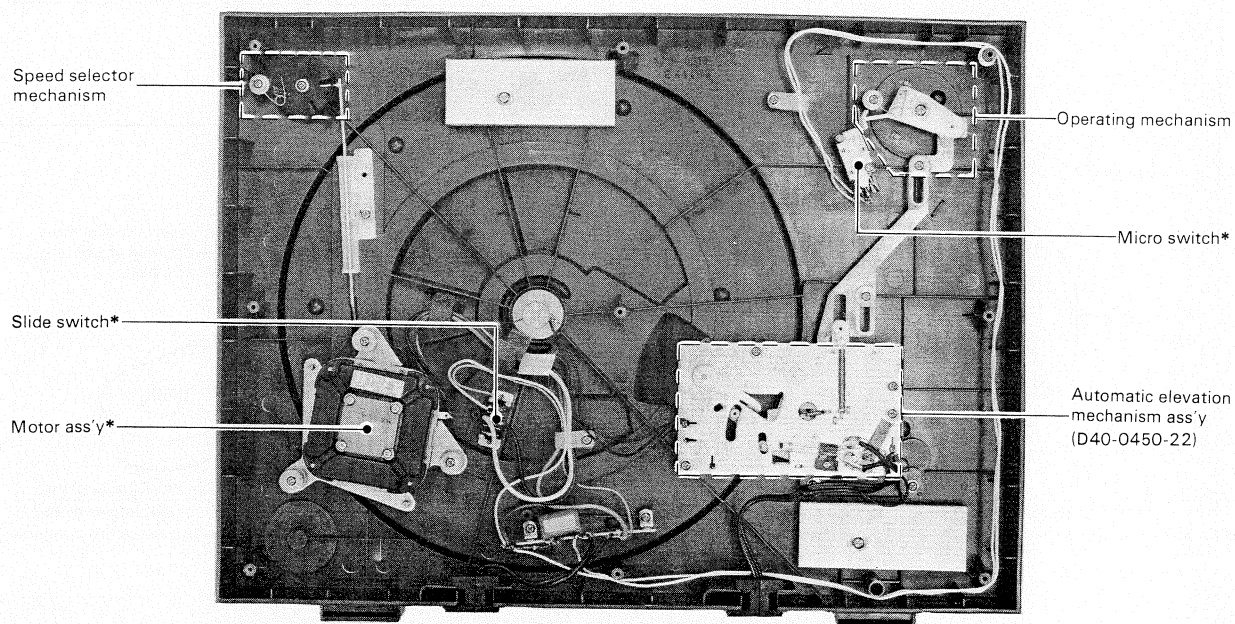
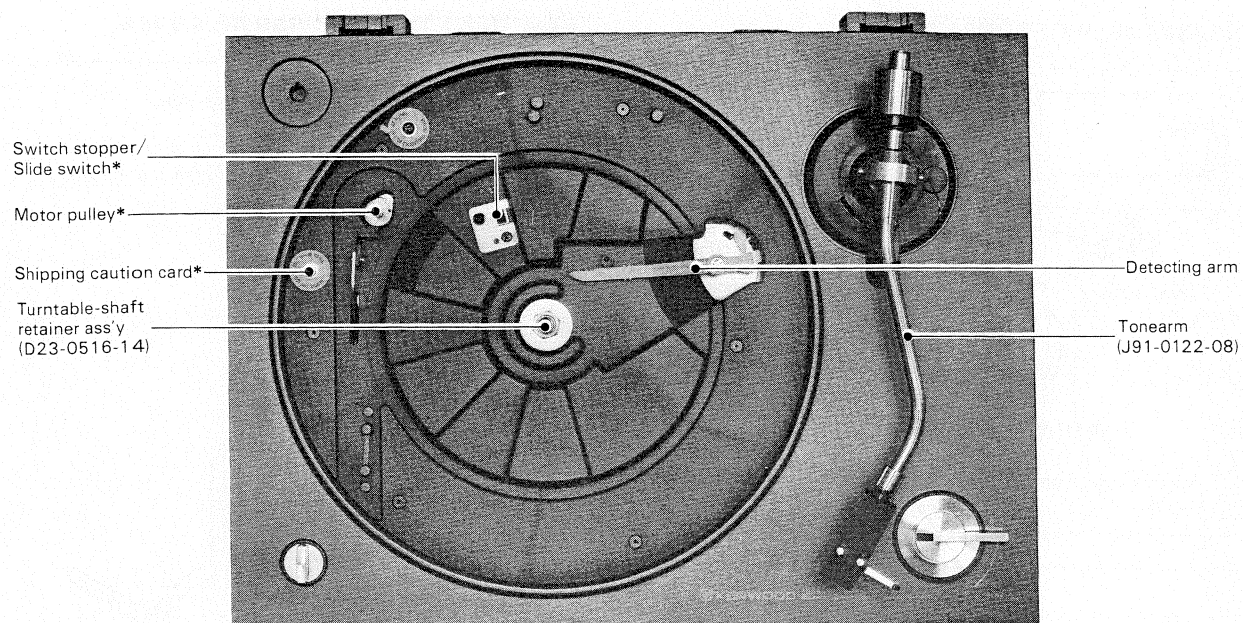
-1500

## EXTERNAL VIEW



\*Refer to Destinations' Parts List.

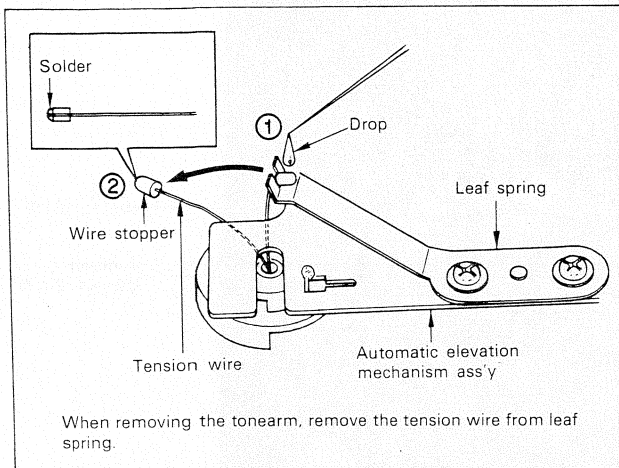
## INTERNAL VIEW



\*Refer to Destinations' Parts List

## DISASSEMBLY FOR REPAIR

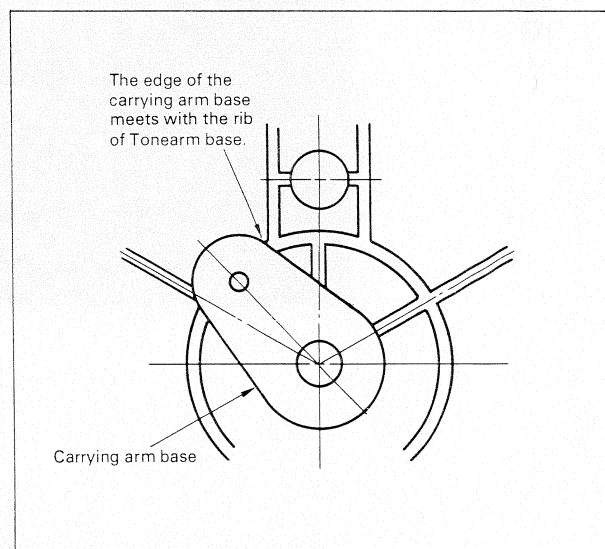
### DISASSEMBLY OF TONEARM



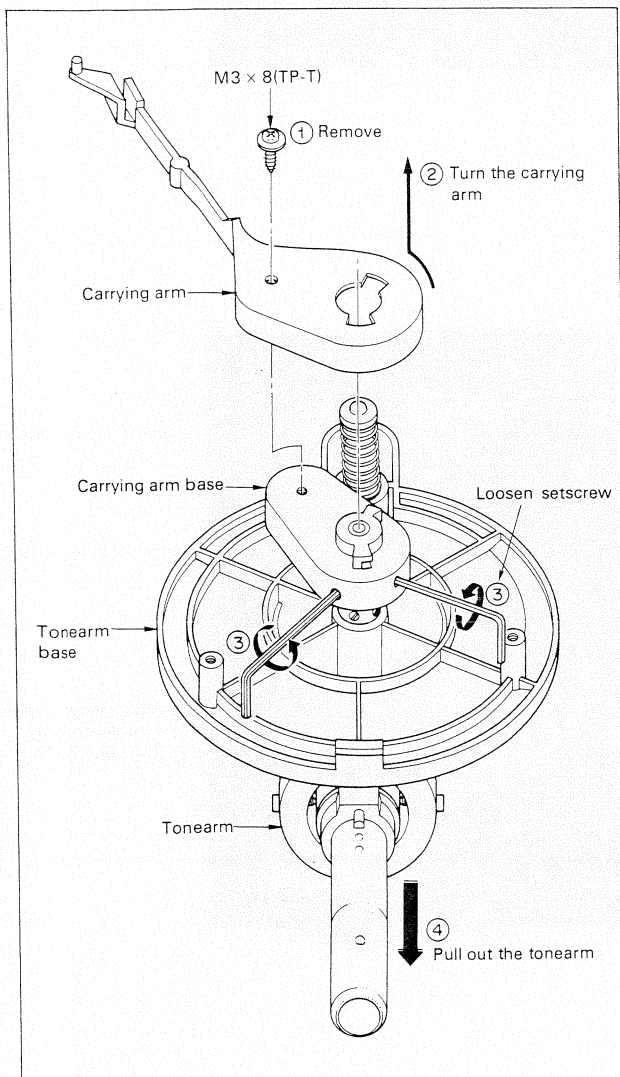
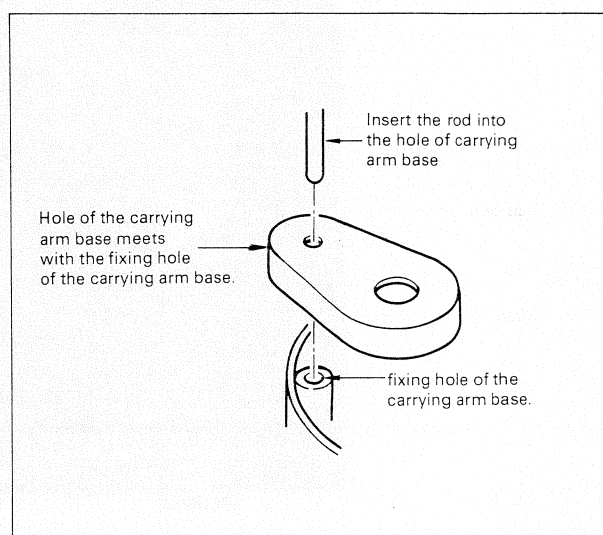
### HOW TO FIX THE CARRYING ARM BASE

- 1 Set the tonearm to the tonearm rest.
- 2 Fix the carrying arm as figure.
- 3 Turn the carrying arm slightly on the carrying arm base and fix the carrying arm with the screw.

#### In case of being No fixing hole



#### In case of using the fixing hole

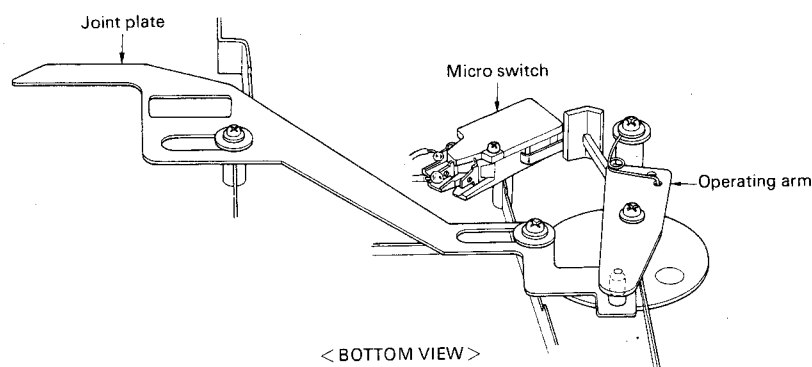


## MECHANISM DESCRIPTION

## AUTOMATIC ELEVATION MECHANISM

When the OPERATION LEVER is pulled toward the front side (PLAY mode), the OPERATING ARM which is located under the OPERATION LEVER traces circular arcs and

turns the microswitch (POWER switch) on. The OPERATING ARM also moves the JOINT PLATE by the other end of the arm.

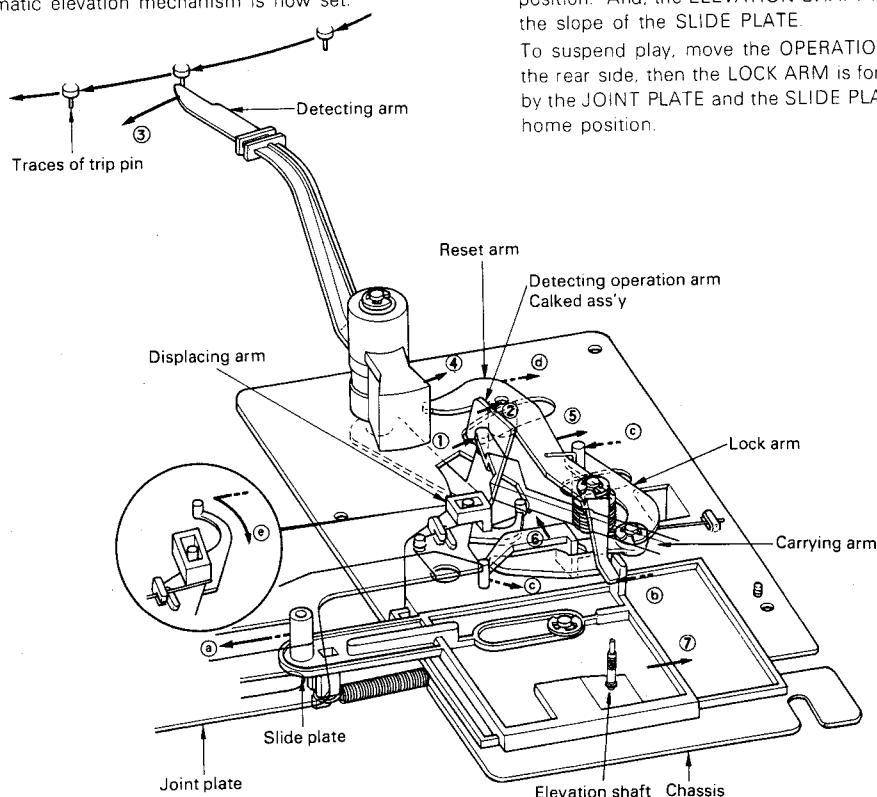


The JOINT PLATE is pulled toward the front side when play starts (③). The JOINT PLATE pulls the SLIDE PLATE (⑥). Then, the SLIDE PLATE is fixed by the LOCK ARM. Before the SLIDE PLATE is fixed, the DISPLACING ARM attached to the SLIDE PLATE pushes the DETECTING OPERATION ARM CALKED ASS'Y and stands vertically (④) to prevent the DETECTING ARM from automatic elevation operation. At the same time, the MUTING switch is turned off before the LOCK ARM fixes the SLIDE PLATE (⑤).

The TONE ARM is lowered by means of the slope of the SLIDE PLATE and the spring of the elevation shaft. The automatic elevation mechanism is now set.

As play draws to an end, the CARRYING ARM located under the TONE ARM pushes the DETECTING OPERATION ARM CALKED ASS'Y (①, ②), so that the DETECTING ARM is moved by the DETECTING OPERATION ARM CALKED ASS'Y to near the track of the TRIP PIN which is attached to the TURNTABLE PLATTER (③). The DETECTING ARM pushes the RESET ARM (④) when it is swung by the TRIP PIN, then the LOCK ARM is pressed to release the SLIDE PLATE (⑤, ⑥). The SLIDE PLATE returns to the home position by means of spring (⑦). During this operation, the LOCK ARM turns the MUTING switch on and the DISPLACING ARM returns to the home position. And, the ELEVATION SHAFT rises according to the slope of the SLIDE PLATE.

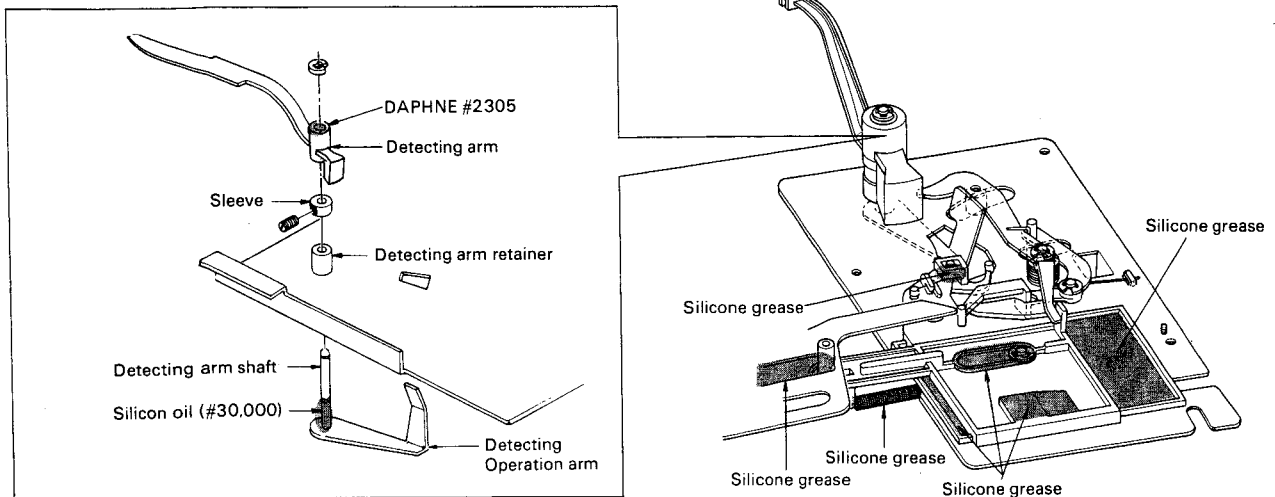
To suspend play, move the OPERATION LEVER toward the rear side, then the LOCK ARM is forced to be moved by the JOINT PLATE and the SLIDE PLATE returns to the home position.



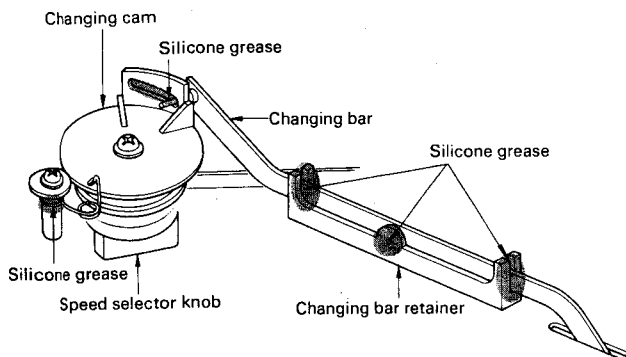


## LUBRICATIONS

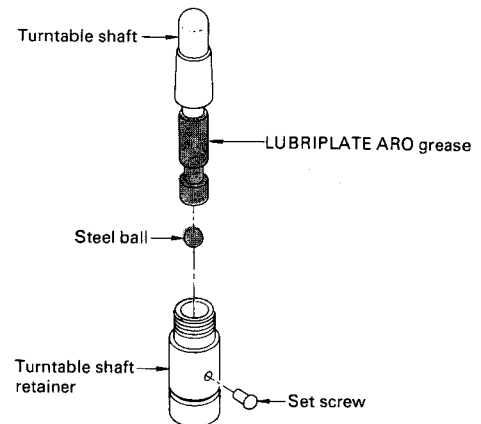
### AUTOMATIC ELEVATION MECHANISM



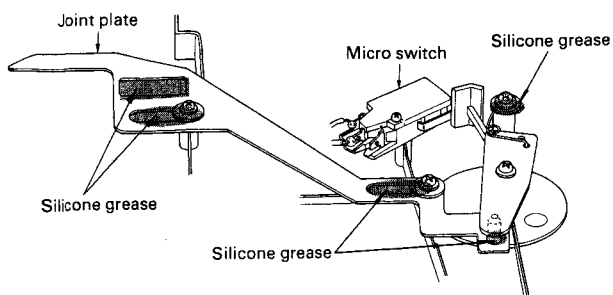
### SPEED SELECTOR MECHANISM



### TURNTABLE SHAFT ASS'Y



### OPERATION MECHANISM



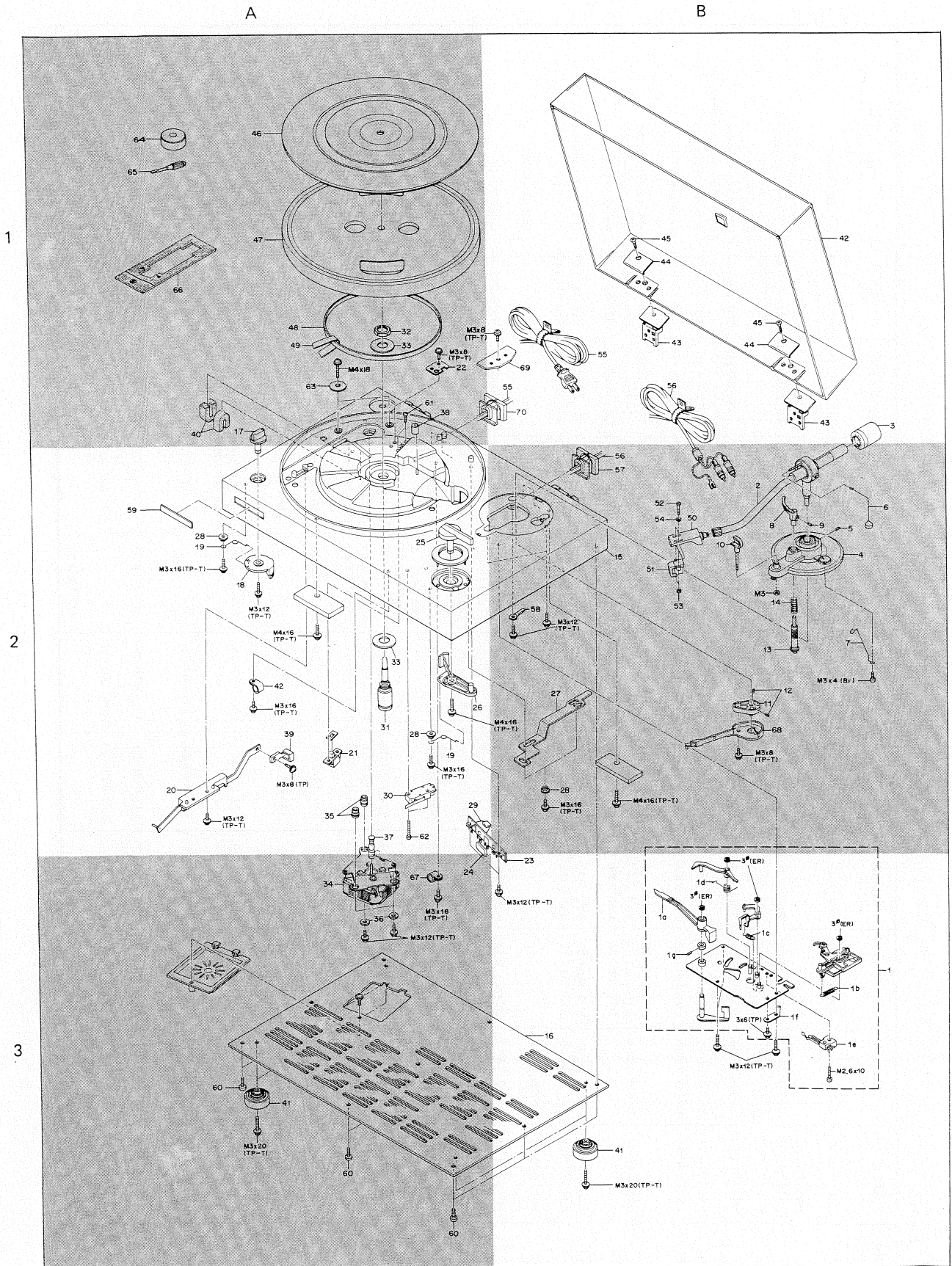
Oil	Parts No.
Silicone grease	W01-9990-00
DAPHNE #2305	W01-9995-09
LUBRI PLATE ARO grease	W01-9996-09
Silicone oil (#30,000)	W01-9998-09

## DESTINATIONS' PARTS LIST

☆: New Parts

Ref. No.	U.S.A. (K)	Canada (P)	PX (U)	Australia (X)	Europe (W)	Scandinavia (L)	England (T)	South Africa (S)	Other Area (M)	Audio Club (H)	Description
15	A02-0316-15	A02-0316-15	A02-0316-15	A02-0316-15	A02-0316-15	A02-0316-15	A02-0317-05	A02-0316-15	A02-0316-15	A01-0316-15	Turntable case ☆
66	B23-0004-04	—	—	—	—	—	B23-0004-04	—	—	—	Overhang gage
59	B43-0534-04	B43-0534-04	B43-0534-04	B43-0534-04	B43-0534-04	B43-0534-04	B43-0535-04	B43-0534-04	B43-0534-04	B43-0534-04	Turntable case badge ☆
—	B46-0061-20	B46-0055-20	B46-0062-20	B46-0064-00	—	—	B46-0060-00	—	—	B46-0062-20	Warranty card
—	—	—	B46-0063-00	—	—	—	—	—	—	—	Warranty card
—	B50-2298-00	B50-2292-00	B50-2298-00	B50-2298-00	B50-2298-00	B50-2298-00	B50-2299-00	B50-2298-00	B50-2292-00	B50-2298-00	Instruction manual ☆
63	B59-0020-04	—	B59-0018-00	B59-0020-04	B59-0020-04	B59-0020-04	B59-0020-04	B59-0020-04	B59-0301-04	B59-0020-04	KENWOOD Service stations' list
24	C90-0145-05	C91-0025-05	C91-0308-05	C91-0308-05	C54-3310-39	C54-3310-39	C54-3310-39	C91-0308-05	C91-0308-05	C54-3310-39	Shipping caution card
37	—	—	D15-0162-04	D15-0162-04	D15-0162-04	D15-0162-04	D15-0162-04	D15-0162-04	D15-0162-04	D15-0162-04	Capacitor 0.01 μF
22	D15-0163-04	D15-0163-04	D15-0163-04	D15-0163-04	D15-0163-04	D15-0163-04	—	D15-0163-04	D15-0163-04	D15-0163-04	Motor pulley (50 Hz)
23	E22-0424-05	E22-0424-05	E22-0424-05	E22-0424-05	E22-0424-05	E22-0424-05	—	E22-0424-05	E22-0424-05	E22-0424-05	Motor pulley (60 Hz)
55	E30-0181-05	E30-0181-05	E30-1317-15	E30-0185-05	E30-0459-05	E30-0459-05	E30-0587-05	E30-0587-05	E30-1317-15	E30-0459-05	Switch stopper
69	F07-0610-04	F07-0610-04	—	—	—	—	F07-0610-04	—	—	—	Lug type terminal strips
—	H01-2312-14	H01-2313-14	H01-2312-14	H01-2312-14	H01-2312-14	H01-2312-14	H01-2321-04	H01-2312-14	H01-2312-14	H01-2312-14	Power cord
70	J42-0312-05	J42-0312-05	J42-0312-05	J42-0308-05	J42-0312-05	J42-0312-05	J42-0312-05	J42-0312-05	J42-0312-05	J42-0312-05	Hole cover plate
52	N09-0850-04	☆ N09-0817-05	N09-0843-08	N09-0843-08	N09-0843-08	N09-0843-08	N09-0850-04	N09-0843-08	N09-0843-08	N09-0843-08	Carton box ☆
—	N09-0852-04	—	—	—	—	—	N09-0851-04	—	—	—	Cord bushing
61	—	—	N09-0167-05	N09-0167-05	N09-0167-05	N09-0167-05	N09-0852-04	—	—	—	Cartridge mounting screw (M 2.6 × 10)
53	N19-0412-04	N14-0108-05	N14-0108-05	N14-0108-05	N14-0108-05	N14-0108-05	N19-0412-04	N14-0108-05	N14-0108-05	N14-0108-05	Cartridge mounting screw (M 2.6 × 15)
54	N19-0175-09	N19-0516-05	N19-0516-05	N19-0516-05	N19-0516-05	N19-0516-05	N19-0175-09	N19-0516-05	N19-0516-05	N19-0516-05	Cartridge mounting nut
29	R40-8312-06	R40-8312-06	R40-8312-06	R40-8312-06	R40-8312-06	R40-8312-06	B40-8312-06	R40-8312-06	R40-8312-06	R40-8312-06	Cartridge mounting washer
21	—	—	S31-2001-05	S31-2001-05	S31-2001-05	S31-2001-05	—	S31-2001-05	S31-2001-05	S31-2001-05	Resistor 120 ± 10% 1/2W
30	S50-1017-05	S50-1017-05	S50-1017-05	S50-1017-05	S50-1017-05	S50-1017-05	S50-1017-05 × 2	S50-1017-05	S50-1017-05	S50-1017-05	Slide switch (power voltage selector)
—	S50-1310-05	S50-1310-05	S50-1310-05	S50-1310-05	—	—	—	S50-1310-05	S50-1310-05	—	Micro switch or Micro switch ☆
51	—	T21-0057-05 (V-48)	T21-0067-05	T21-0067-05	T21-0067-05	T21-0067-05	—	T21-0067-05	T21-0067-05	T21-0067-05	Cartridge ☆ (V-39 MKIII)
34	T41-0118-05	T41-0118-05	T41-0112-05	T41-0112-05	T41-0116-05	T41-0116-05	T41-0116-05	T41-0112-05	T41-0112-05	T41-0116-05	Motor ass'y ☆
65	—	—	W01-0035-00	W01-0035-00	W01-0035-00	W01-0035-00	—	W01-0035-00	W01-0035-00	W01-0035-00	Small screw driver
—	—	—	—	—	—	—	X27-1300-61	—	—	—	Power supply PCB ass'y ☆

# EXPLODED VIEW





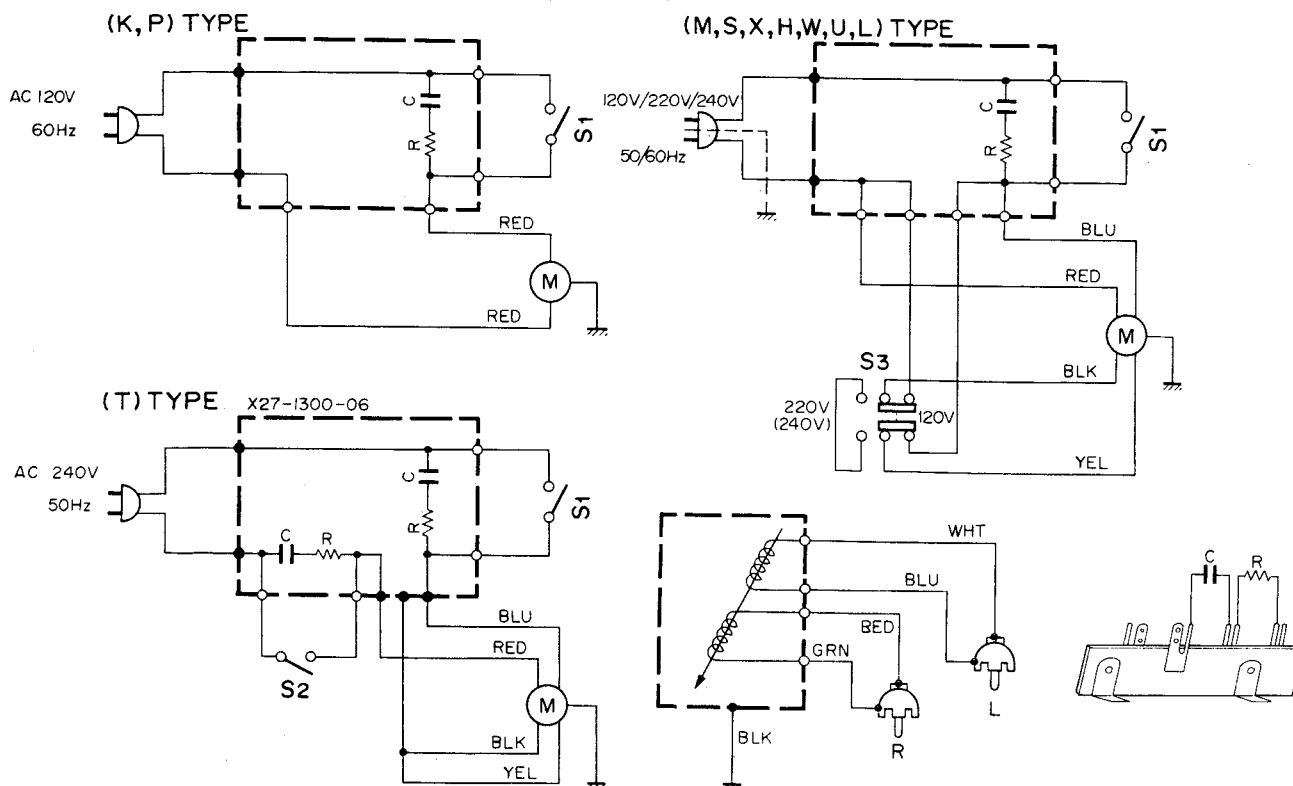
## EXPLODED VIEW PARTS LIST

☆: New parts, ★: refer to Destinations' parts list (p. 7).

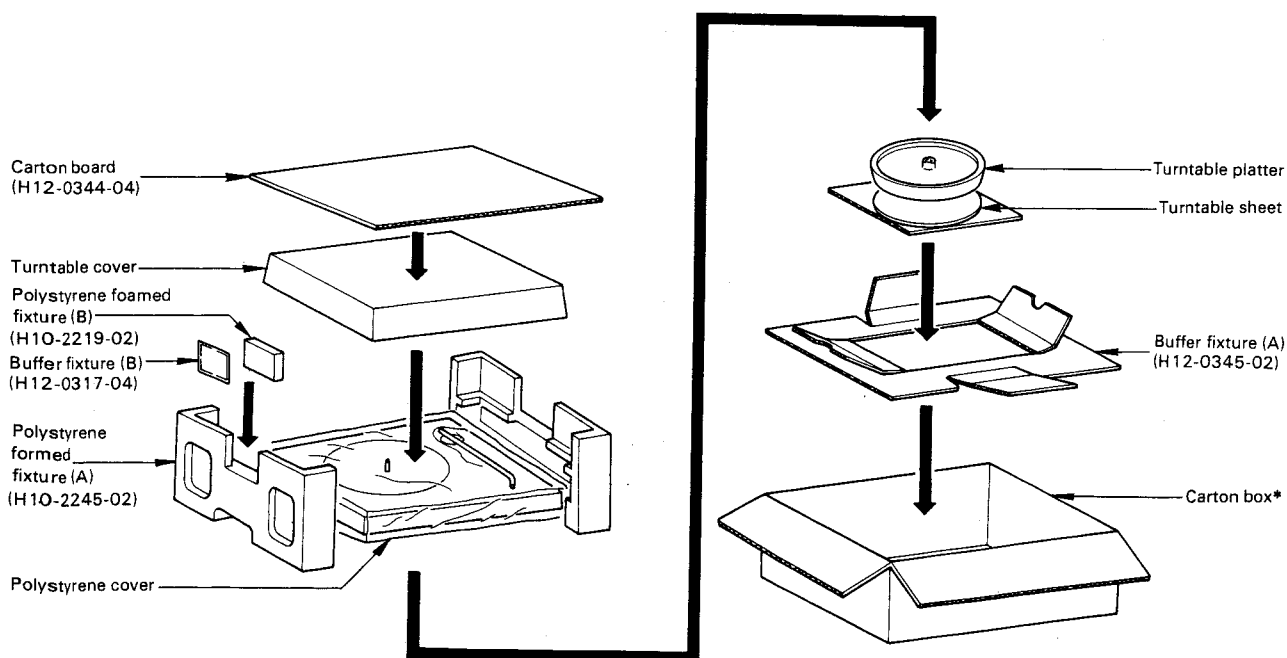
Ref. No.	Parts No.	Description	Remarks	Ref. No.	Parts No.	Description	Remarks
1	D40-0450-22	Automatic elevation mechanism ass'y	☆ 3B	51	★	Cartridge	1B
1a	D10-0562-04	Detecting arm	☆ 3B	52	★	Cartridge mounting screw	1B
1b	G01-0708-14	Tension spring A	☆ 3B	53	★	Cartridge mounting nut	1B
1c	G01-0709-14	Tension spring B	☆ 3B	54	★	Cartridge mounting washer	1B
1d	G01-0711-04	Torsion spring C	☆ 3B	55	★	Power cord	1B
1e	S46-2013-13	Muting switch	3B	56	E30-1332-05	Audio cord	☆ 1B,2B
1f	G02-0315-14	Leaf spring	☆ 3B	57	J42-0312-05	Cord bushing	1B,2B
1g	N72-2604-46	Set screw	3B	58	J19-0306-05	Lead holder	2B
2	J91-0122-08	Tonearm	☆ 2B	59	★	Turntable case badge	☆ 2A
3	D91-0117-08	Weight ass'y	☆ 1B	60	N09-0587-05	Tapping screw	3A
4	J19-1293-08	Tonearm base	☆ 2B	61	★	Polycarbonate screw	1A
5	N77-4010-45	Mounting screw	2B	62	N09-0857-05	Tapping screw (M3 × 20)	☆ 2A
6	D91-0118-08	Canceller weight ass'y	☆ 2B	63	★	Shipping caution card	1A
7	J19-1294-08	Canceller stand	☆ 2B	64	W01-0057-14	EP adaptor	1A
8	D39-0085-08	Tonearm support ass'y	☆ 2B	65	★	Small screwdriver	1A
9	N73-2604-46	Mounting screw	2B	66	★	Overhang gage	1A
10	D39-0087-08	Tonearm rest	☆ 2B	67	J61-0050-15	Nylon crammer	2A
11	J19-1295-08	Carrying tonearm base	☆ 2B	68	D10-0569-04	Carrying arm	☆ 2B
12	N77-3004-45	Mounting screw	2B	69	★	Hole cover plate	1A
13	D21-0658-08	Elevation shaft	☆ 2B	70	★	Cord bushing	1B
14	G01-0713-08	Compression spring	☆ 2B	—	H10-2245-02	Polystyrene foamed fixture (A)	☆
15	★	Turntable case	☆ 2B	—	H10-2219-02	Polystyrene foamed fixture (B)	☆
16	A40-0532-05	Bottom board	☆ 3B	—	H12-0317-04	Buffer fixture (B)	—
17	K29-0651-14	Speed selector knob	☆ 1A	—	H12-0344-04	Carton board	☆
18	D12-0214-04	Changing cam	☆ 2A	—	H12-0345-02	Buffer fixture (A)	☆
19	G01-0712-14	Torsion spring	☆ 2A	—	H25-0029-04	Polyethylene bag × 3	—
20	D10-0565-04	Changing bar	☆ 2A	—	H25-0078-04	Polyethylene bag	—
21	★	Slide switch	2A	—	H25-0159-04	Polyethylene bag	—
22	★	Switch stopper	1A				
23	★	Lug type terminal strips	3B				
24	★	Capacitor	3A				
25	K29-0652-04	Operating lever	☆ 2A				
26	D10-0568-14	Operating arm	☆ 2A				
27	D22-0301-03	Joint plate	☆ 2B				
28	J31-0428-04	Collar	☆ 2A,2B				
29	★	Carbon resistor	2B				
30	★	Micro switch	2A				
31	D23-0516-14	Turntable-shaft retainer ass'y	☆ 2A				
32	N14-0048-14	Nut	1A				
33	N19-0550-14	Washer	☆ 1A				
34	★	Motor ass'y	3A				
35	G13-0445-04	Rubber cushion	☆ 2A				
36	N19-0084-04	Washer	3A				
37	★	Motor pulley	2A				
38	J42-0315-04	Sleeve	1A				
39	D10-0225-34	Changing guider	2A				
40	G13-0447-04	Cushion	☆ 1A				
41	J02-0329-05	Insulator	☆ 3A,3B				
42	A53-0221-12	Turntable cover	☆ 1B				
43	J50-0307-05	Turntable cover hinge (1)	1B				
44	J50-0308-05	Turntable cover hinge (2)	1B				
45	N33-4008-47	Oval countersunk screw	1B				
46	G16-0326-13	Turntable sheet ass'y	☆ 1A				
47	D02-0026-01	Turntable platter	☆ 1A				
48	D16-0057-03	Drive belt	1A				
49	J69-0019-04	Tape	1A				
50	J92-0056-05	Head shell	☆ 2B				

## SCHEMATIC DIAGRAMS/PACKING

### SCHEMATIC DIAGRAMS



### PACKING



\*Refer to Destinations' Parts List

## SPECIFICATIONS

### MOTOR AND TURNTABLE

Drive System .....	Belt drive system
Motor .....	4 pole synchronous motor
Turntable Platter .....	30 cm (12 inch) diameter die-cast aluminum alloy Weight: 0.55 kg (1.2 lbs)
Speed .....	2 Speeds, 33-1/3 and 45 r.p.m.
Wow and Flutter .....	Less than 0.05% (WRMS)
Rumble .....	DIN weighted better than -65 dB

### TONE ARM

Type .....	Static balance type, S-Shaped tubular arm, EIA plug-in connector
Effective Tonearm Length .....	225 mm (8-7/8 inch)
Overhang .....	15 mm (9/16 inch)
Tracking Error .....	±1.5 degrees
Tracking Force Variable .....	
Range .....	0 to 3 grams
Usable Cartridge Weight .....	4 to 10 grams

### CARTRIDGE

(U.S.A. and U.K. Models are not Equipped with the V-39MKIII or V-48 Cartridge.)

Furnished Cartridge .....	V-39MKIII or V-48
Stylus .....	N-39MKIII or N-48 with 0.5 mil diamond
Frequency Response .....	20 Hz to 20,000 Hz
Output Voltage .....	2.3 mV (1,000 Hz, 5 cm/sec.)
Optimum Tracking Force .....	1.5 ± 0.3, -0 grams ..... V-39MKIII 2.0 ± 0.5 grams ..... V-48
Load Impedance .....	47k ohms
Replacement Stylus .....	N-39MKIII/N-48

### ADDITIONAL FEATURES

Auto-up/cut tone arm mechanism,  
Anti-skating device,  
Viscous-damped cueing device,  
Headshell stand,  
Tracking force direct-readout counter,  
Plug-in type headshell,  
Built-in isolator

### MISCELLANEOUS

Power Requirements .....	AC 120V, 60 Hz: U.S.A. and Canada model AC 240V, 50 Hz: U.K. model AC 120/220V (Switchable), 50/60 Hz: European model AC 120/240V (Switchable), 50/60 Hz: Others
Power Consumption .....	8 watts
Dimensions .....	W 468 mm × H 140 mm × D 363 mm W 18-7/16" × H 5-1/2" × D 14-5/16"
Weight .....	4.8 kg (10.6 lbs)
SUPPLIED ACCESSORIES .....	45 r.p.m. adaptor

### CABINET

Material .....	Construction of cabinet is injection molded from limestone powders, poly-propylene powders and other inorganic filamentous
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(Kenwood follows a policy of continuous advancements in development.  
For this reason specifications may be changed without notice.)

Entraînement .....	Par courroie
Moteur .....	Synchrone à 4 pôles
Plateau .....	Diamètre de 30 cm (12 pouces) coulé en coquille, en alliage d'aluminium Poids 0.55 kg (1.2 livres)
Vitesse .....	2 vitesses, 33-1/3 et 45 tours
Pleurage et sautellement .....	Moins de 0.05% (WRMS)
Grogement .....	Pondéré DIN, mieux que -65 dB

### BRAS DE LECTURE

Type .....	Bras tubulaire en S, statiquement équi- libré, connecteur enfichable EIA
Longueur effective .....	225 mm (8-7/8 pouces)
Dépassement par rapport à l'axe du plateau .....	15 mm (9/16 pouces)
Erreur de piste .....	±1.5 degré
Gamme variable de force d'appui .....	0 à 3 grammes
Poids utile de la cellule .....	4 à 10 grammes

### CELLULE

(Les modèles pour les Etats-Unis et le Royaume-Uni ne sont pas équipés de la cellule V-39MKIII ou V-48.)

Cellule fournie .....	V-39MKIII ou N-48
Pointe d'appui .....	N-39MKIII ou N-48 avec diamant de 0.5 mil.
Réponse de fréquence .....	20 Hz à 20,000 Hz
Tension de sortie .....	2.3 mV (1,000 Hz, 5 cm/sec.)
Force d'appui optimale .....	1.5 ± 0.3, -0 grammes ..... V-39MKIII 2.0 ± 0.5 grammes ..... V-48
Impédance de charge .....	47k ohms
Pointe de recharge .....	N-39MKIII/N-48

### AUTRES

Caractéristiques .....	Système automatique d'arrêt/retour du bras Dispositif anti-skating Lève-bras hydraulique Porte-coquille de cellule Bague graduée indiquant la force d'appui Coquille de cellule enfichable Isolateur incorporé
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### DIVERS

Alimentation .....	CA 120V, 60 Hz: Modèle Etats-Unis et Canada CA 240V, 50 Hz: Modèle Royaume-Uni CA 120/220V (commutable), 50/60 Hz: Modèle européen CA 120/240 (commutable), 50/60 Hz: Autres
Consommation .....	8 watts
Dimensions .....	W 468 mm × H 140 mm × D 363 mm
Poids .....	4.8 kg (10.6 livres)
ACCESSOIRES FOURNIS .....	Adaptateur 45 tours
COFFRET .....	
Matériel .....	Construction Moulée à Injection de pou- dres Calcaires, de poudres Poly-Pro- pylène et autres Filaments inorganiques.

(KENWOOD appliquant une politique de progrès continus, les spécifications  
peuvent être modifiées sans préavis.)